

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An image synthesizing apparatus for synthesizing two images, comprising:

coefficient setting means for setting a blending coefficient α ($0 \leq \alpha \leq 1$) for each of a plurality of specific picture elements of a first image at a single specified value,

wherein the single specified value is proportional to a value of a specific picture element component of the plurality of specific picture elements of the first image included in picture element components A of the first image when said value of the specific picture element is not zero,

wherein said single specified value is set to zero when said value of the specified picture element is zero; and

arithmetic means for performing an operation on each of the plurality of said picture element components A, and each of a plurality of picture element components B of a second image in accordance with the single specified value of each of said blending coefficients α , thereby eliminating a need for setting a blending coefficient for every picture element, as follows:

$$A * \alpha + B * (1 - \alpha)$$

and performing said operation on all the picture element components A and the picture element components B of a picture element that has the specific picture element component representing the predetermined value by using said blending coefficient α set by said coefficient setting means,

wherein the picture element components A and the picture element components B comprise a luminance component Y and a color difference component selected from one of two color difference components according to sampling frequencies of the two color difference components, and

~~wherein the one of two color difference components is selected as a function of a sampling frequency.~~

2. (Currently Amended) An image synthesizing apparatus as claimed in claim 1,

wherein a value of said specific picture element component that is outside a specified range of values that can be assumed by said specific picture element component and does not affect display of said first image ~~is recorded at said specified value in said operation set~~ to be a predetermined value.

3. (Original) An image synthesizing apparatus as claimed in claim 1,
wherein the specific picture element component is a luminance component.

4. (Canceled)

5. (Original) An image synthesizing apparatus as claimed in claim 1,

wherein said coefficient setting means sets said blending coefficient α at zero when said specific picture element component is zero, and sets said blending coefficient α at a specified value that satisfies $0 < \alpha \leq 1$ when said specific picture element component is other than zero.

6. (Original) An image synthesizing apparatus as claimed in claim 1,

wherein data of said first image and data of said second image are data in an ITU-R601 format having a luminance component and a color difference component as said picture element components A and said picture element components B, respectively.

7. (Currently Amended) An image synthesizing method for synthesizing

two images, said method comprising the steps of:

setting a blending coefficient α for each of a plurality of specific picture elements of a first image to a single specified value,

wherein the single specified value is proportional to a value of a specific picture element component of the plurality of specific picture elements of the first image included in picture element components A of a first image when said value of the specific picture element is not zero,

wherein said single specified value is set to zero when said value of the specified picture element is zero; and

performing an operation on each of the plurality of the picture element components A of the first image, and each of a plurality of picture element components B of a second image in accordance with the single specified value of each of the blending coefficients α ($0 \leq \alpha \leq 1$) thereby eliminating a need for setting a blending coefficient for every picture element, as follows:

$$A * \alpha + B * (1 - \alpha),$$

wherein the picture element components A and the picture element components B comprise a luminance component Y and a color difference component selected from one of two color difference components according to sampling frequencies of the two color difference components, and

~~wherein the one of two color difference components is selected as a function of a sampling frequency.~~

8. (Previously Presented) The image synthesizing apparatus according to claim 1,

wherein the specific picture element component is a color component or a color difference component when image data includes a color component or a color difference component.

9. (Previously Presented) The image synthesizing apparatus according to claim 1,

wherein a relationship between the specific picture element component and the blending coefficient is preset in an image generation means.

10. (Previously Presented) The image synthesizing apparatus according to claim 1,

wherein a relationship between the specific picture element component and the blending coefficient is selected by a user.

11. (New) The image synthesizing method according to claim 7,
wherein the specific picture element component is a color component or a color difference component when image data includes a color component or a color difference component.

12. (New) The image synthesizing method according to claim 7,
wherein a relationship between the specific picture element component and the blending coefficient is preset in an image generation means.

13. (New) The image synthesizing method according to claim 7,

wherein a relationship between the specific picture element component and the
blending coefficient is selected by a user.